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EXAMINER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/508,869	STAHL ET AL.	
	Examiner	Art Unit	
	Hai Tran	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 February 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 02/06/2004 have been fully considered but they are not persuasive.

Claim 1, Applicant argues that Ludtke does not disclose "generating, in said peripheral consumer electronic device, digital OSD data in the form of video data...".

In response, the Examiner respectfully disagrees with Applicant because Ludtke shows "Device Image" of Fig. 3, el. 26 in which Ludtke describes as part of **"self-describing information"** to represent the graphical representation of the (peripheral) device itself (icons of Fig. 5; Col 6, lines 15-21).

Ludtke further discloses that "Device Image", as "digital OSD video data" displays on the television, that is part of **"self-describing information"** represents with icons 60, 64, 68 and 69 in Fig. 5. furthermore, the "Device Image" is generated within the peripheral device wherein it is stored in ROM 20 (i.e., camera 10) and transferred to the computer system 18 for displaying on the TV 19 (Fig. 5) in the form of video data. The Examiner cites Col. 9, lines 14-19 to support "... the icons are the graphical representations *obtained by the computer system 18 from the ROM 20* within each device...". Ludtke further discloses in one embodiment wherein a (peripheral) device is coupled in a network configuration, which includes only a television 19 without a processor (Col. 7, lines 48-60). In this embodiment, Ludtke clearly discloses the "Device Image"/self-describing information (Fig. 3, el. 26) is in a format (i.e., video) understood by the TV 19 (without a processor) so to be able to display, as video, on the

TV 19 (Col. 5, lines 3-7) with the less elaborate GUI (i.e., Fig. 5) and through this GUI, the user is then able to control the operation of the device (Col. 5, lines 25-35).

Thus, Ludtke clearly meets Applicant' s limitation "generating, in said peripheral consumer electronic device, digital OSD data in the form of video data...".

Applicant further argues Ludtke fails to disclose "...**transferring** said digital video content and said digital OSD data ...**as separate data** via said digital bus to said display..."

In response, the Examiner respectfully disagrees with Applicant because Ludtke' s network uses IEEE-1394 for interconnecting all connected devices (Col. 5, lines 35-60). The Examiner submits that **transferring** digital video content and control data **as separate data** via serial digital bus IEEE-1394 is notoriously well known in the art because standard IEEE-1394 communication protocol is used to transmit digital video data over isochronous protocol and control data over asynchronous protocol for communication between two devices. Therefore, it would have been obvious to one of ordinary skill in the art to take the advantage of the standard IEEE-1394 communication protocol to transmit digital video content over isochronous protocol and digital OSD data in the form of video data (control data) over asynchronous protocol, as **separate data** over the 1394 Bus, so to save cost of implementation and furthermore able to carry simultaneously video and data over the same serial bus at high speed transmission.

As to claims 9-10 with newly amended limitation "...generating, in said peripheral consumer electronic device, digital video data representative of an on screen display

menu associated with said peripheral consumer electronic device", the examiner responds with respect to the above arguments.

As to claim 12, Applicant's argument is moot due to newly amended claim and a new ground of rejection follows.

Claim Objections

Claim 12 is objected to because of the following informalities:

Claim 12 recites the limitation "said digital data" in line 7. There is insufficient antecedent basis for these limitations in the claim.

For examination purposes "said digital data" is treated as "digital video data". Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ludtke et al. (US 6421069) in view of P1394 Draft 8.0v2.

Regarding claim 1, Ludtke discloses a peripheral consumer electronic device (VCR 14; Camera 10; Fig.1; Col. 4, lines 45-47) comprising:

Means for communicating (24, 12) with a display device 18 (Col. 4, lines 48-65+ and Col. 5, lines 35-60) interconnected by a digital bus 12, 17, 16;

means for providing digital video content (Camera 10 or VCR 14 provides stream of video data under play mode; Col. 10, lines 19-21 and Col.11, lines 1);

means for generating, in the peripheral consumer electronic device, digital OSD video data representative of an on-screen display menu associated with the peripheral consumer electronic device, the digital OSD video data ("Device Image" in Fig. 3, el. 26 which is part of **"self-describing information"** represents with icons 60, 64, 68 and 69, as "digital OSD video data" displays on the television. The "Device Image" is generated, stored in ROM 20 within the peripheral device (i.e., camera 10) and transferred to the computer system 18 for displaying on the TV 19 (Fig. 5) in the form of video data. The Examiner cites Col. 9, lines 14-19 to support "... the icons are the graphical representations *obtained by the computer system 18 from the ROM 20* within each device...". Ludtke further discloses in one embodiment in which when a (peripheral) device is coupled in a network configuration, which includes only a television 19 without a processor see Col. 7, lines 48-60. In this embodiment, Ludtke clearly discloses the "Device Image"/self-describing information is in a format (i.e., video) understood by the TV 19 (without a processor) so to be able to display on the TV 19, see Col. 5, lines 3-7, with the less elaborate GUI, i.e., Fig. 5, and through this GUI, the user is then able to control the

operation of the device see Col. 5, lines 25-35) being capable of being displayed on the display device; and

means for transferring (24) the digital video content (Camera 10 or VCR 14 provides stream of video data under play mode) and the digital OSD video data (self-describing information) capable of being displayed via the digital bus 12, 17, 16 to the display device 18 or 19 (Col. 5, lines 39-60 and Col. 10, lines 3-36) whereby the digital video content and the digital OSD video data may be subsequently combined and displayed on the display device 18 or 19.

Ludtke fails to disclose the digital video content and the digital OSD video data are transferring **as separate data** via the digital bus; however, Ludtke' s network uses IEEE-1394 for interconnecting all connected devices and transferring video data and digital OSD video data (Col. 5, lines 35-60). Ludtke further discloses in the section "background of the invention" that a communication protocol specifying isochronous and asynchronous access/transfer type is known to be the IEEE-1394 standard (Col. 1, lines 25-51).

P1394 Draft 8.0v2 (pages 151-179) discloses that utilizing an asynchronous transfer mechanism of the serial bus and controlling the equipments connected to IEEE-1394 serial bus is done by function control protocol (FCP) in which the peripheral device transmits a control command and response by asynchronous packet. The structure of the FCP frame (the read/write request for data block packet or 1st message) in the asynchronous data transmission mode of IEEE-1394 comprises the location (Source ID) and size of the digital data (Data Length) in a

memory device associated with the peripheral device as shown by P1394 Draft 8.0v2 (Read request, page 154, Fig. 6-8 and page 157, Fig. 6-12 and Write request, page 158, Fig. 6-13). Therefore, it would have been obvious to one of ordinary skill in the art to take the advantage of the standard IEEE-1394 communication protocol to transmit digital video content over isochronous protocol and digital OSD data in the form of video data (control data) over asynchronous protocol, as **separate data** over the 1394 Bus, so to save cost of implementation and furthermore able to carry simultaneously video and data over the same serial bus at high speed transmission.

Regarding claim 2, as to "means for writing ... to a memory device associated with the display device" id further met by Ludtke (Col. 3, lines 36-42 and Col. 5, lines 1-14).

Regarding claim 3, Ludtke further discloses a means for navigating said OSD menu in response to a user initiated command (selecting and dragging the camera 60 into the 1st subpane 72 as a source device for transmitting data; selecting and dragging the VCR64 into the 2nd subpane 72 as a sink device for transmitting data Col. 9, lines 43-55), said navigating means generates updated digital video data in response to said user initiated command (the 1st subpane 72 is updated with graphical representation 80 and available control functions 81 and 2nd subpane 74 is updated with graphical representation 84 and available control functions 85 in response to the selecting and dragging function, Fig. 7; Col. 9, lines 55-65+); and

write the updated digital video data to the memory device (the updated subpane must be stored in the memory buffer of the controlling device), said user initiated command controls operating modes of said peripheral consumer electronic device (Col. 10, lines 2-36).

Regarding claim 4, Ludtke further discloses a mapping means for identifying the connectivity of the peripheral consumer electronic device with other devices on the digital bus (Fig. 5, Col. 8, lines 65- Col. 9, lines 35).

Regarding claim 5, Ludtke further discloses means for receiving characteristic information of each device connected on the digital bus (Col. 9, lines 14-36);

Regarding claim 6, Ludtke further discloses means (Fig. 1, elements 10 or 14) for processing video data (Col. 10, lines 19-21).

Regarding claim 7, Ludtke (Fig. 1) discloses a method for controlling a peripheral consumer electronic device (VCR 14; Camera 10; Fig.1; Col. 4, lines 45-47) interconnected via an IEEE 1394 serial bus 12, 17, 16 to a display device 18 or 19 (Col. 4, lines 48-65+ and Col. 5, lines 35-60) comprising:

Generating, in the peripheral consumer electronic device, digital video data representative of an OSD menu associated with the peripheral device, the digital video data ("Device Image" in Fig. 3, el. 26 which is part of **"self-describing**

information" represents with icons 60, 64, 68 and 69, as "digital OSD video data" displays on the television. The "Device Image" is generated, stored in ROM 20 within the peripheral device (i.e., camera 10) and transferred to the computer system 18 for displaying on the TV 19 (Fig. 5) in the form of video data. The Examiner cites Col. 9, lines 14-19 to support "... the icons are the graphical representations *obtained by the computer system 18 from the ROM 20* within each device...". Ludtke further discloses in one embodiment in which when a (peripheral) device is coupled in a network configuration, which includes only a television 19 without a processor see Col. 7, lines 48-60. In this embodiment, Ludtke clearly discloses the "Device Image"/self-describing information is in a format (i.e., video) understood by the TV 19 (without a processor) so to be able to display on the TV 19, see Col. 5, lines 3-7, with the less elaborate GUI, i.e., Fig. 5, and through this GUI, the user is then able to control the operation of the device see Col. 5, lines 25-35) being capable of being displayed;

transferring (24) the digital video content (Camera 10 or VCR 14 provides stream of video data under play mode) and the digital video data (self-describing information) via the digital bus 12, 17, 16 to the display device 18 or 19 whereby the digital video content and the digital video data may be combined and displayed on the display device (Col. 5, lines 39-60 and Col. 10, lines 3-36).

As to limitations, "...utilizing an isochronous transfer mechanism of the serial bus..." for transferring digital video content and "...utilizing an asynchronous transfer mechanism of the serial bus..." for transferring the digital data via the serial

bus to the display device; Ludtke silences regarding the communication protocol specifying as isochronous and asynchronous transfer/access type over the IEEE-1394 . However, Ludtke discloses Camera 10 or VCR 14 provides stream of video data under play mode to the display device (Col. 10, lines 19-21 and Col. 10, lines 6-Col.11, lines 1) and transferring the digital data (... the self-describing information and other software available...) via the serial bus to the display device (Col. 5, lines 39-60 and Col. 10, lines 3-36). Ludtke further discloses in the section "background of the invention" that a communication protocol specifying isochronous and asynchronous access/transfer type is known to be the IEEE-1394 standard (Col. 1, lines 25-51).

P1394 Draft 8.0v2 (pages 151-179) discloses that utilizing an asynchronous transfer mechanism of the serial bus and controlling the equipments connected to IEEE-1394 serial bus is done by function control protocol (FCP) in which the peripheral device transmits a control command and response by asynchronous packet. The structure of the FCP frame (the read/write request for data block packet or 1st message) in the asynchronous data transmission mode of IEEE-1394 comprises the location (Source ID) and size of the digital data (Data Length) in a memory device associated with the peripheral device as shown by P1394 Draft 8.0v2 (Read request, page 154, Fig. 6-8 and page 157, Fig. 6-12 and Write request, page 158, Fig. 6-13). Therefore, it would have been obvious to one of ordinary skill in the art to claim the use of isochronous and asynchronous protocol for communication between devices so to take the advantage of the IEEE-1394

communication protocol standard defined by IEEE-1394 such as carrying simultaneously Video and data over the same serial bus at high speed transmission.

Regarding claim 8, Ludtke further discloses

Receiving control information in response to a user initiated command, the control information controlling operating modes of the peripheral device (Col. 10, lines 2-36);

Navigating the menu in the peripheral device in response to the control information (selecting and dragging the camera 60 into the 1st subpane 72 as a source device for transmitting data; selecting and dragging the VCR64 into the 2nd subpane 72 as a sink device for transmitting data Col. 9, lines 43-55), wherein the step of navigating comprises updating the digital data (for each selecting and dragging operation, the 1st and 2nd subpane are updated); and

Transferring the updated digital data (the 1st subpane 72 is updated with graphical representation 80 and available control functions 81. 2nd subpane 74 is updated with graphical representation 84 and available control functions 85 in response to the selecting and dragging function, Fig. 7; Col. 9, lines 55-65+) to the display device.

Regarding claim 9, Ludtke discloses a method for controlling a peripheral consumer electronic device interconnected via an IEEE 1394 serial bus to a display device 18/19 (Fig. 1; Col. 5, lines 35-60) comprises:

Mapping the connectivity of each device on the serial bus (Fig. 5, Col. 8, lines 65- Col. 9, lines 35).

Communicating with the display device 18/19 (Col. 4, lines 48-65+ and Col. 5, lines 35-60)

Generating, in the peripheral consumer electronic device, digital video data representative of an OSD menu associated with the peripheral consumer electronic device ("Device Image" in Fig. 3, el. 26 which is part of **"self-describing information"** represents with icons 60, 64, 68 and 69, as "digital OSD video data" displays on the television. The "Device Image" is generated, stored in ROM 20 within the peripheral device (i.e., camera 10) and transferred to the computer system 18 for displaying on the TV 19 (Fig. 5) in the form of video data. The Examiner cites Col. 9, lines 14-19 to support "... the icons are the graphical representations *obtained by the computer system 18 from the ROM 20* within each device...". Ludtke further discloses in one embodiment in which when a (peripheral) device is coupled in a network configuration, which includes only a television 19 without a processor see Col. 7, lines 48-60. In this embodiment, Ludtke clearly discloses the "Device Image"/self-describing information is in a format (i.e., video) understood by the TV 19 (without a processor) so to be able to display on the TV 19, see Col. 5, lines 3-7, with the less elaborate GUI, i.e., Fig. 5, and through this GUI, the user is then able to control the operation of the device see Col. 5, lines 25-35); and

As to limitations "...utilizing an asynchronous transfer mechanism of the serial bus" and "Providing to the display device a first message indicative of the availability

of the digital data, said first message comprising the location and size of the digital data in a memory device associated with the peripheral device", Ludtke does not specifically disclose it. However, Ludtke discloses in the background of the invention that a communication protocol specifying isochronous and asynchronous access/transfer type is known to be the IEEE-1394 standard (Col. 1, lines 25-51).

P1394 Draft 8.0v2 (pages 151-179) discloses that utilizing an asynchronous transfer mechanism of the serial bus and controlling the equipments connected to IEEE-1394 serial bus is done by function control protocol (FCP) in which the peripheral device transmits a control command and response by asynchronous packet. The structure of the FCP frame (the read/write request for data block packet or 1st message) in the asynchronous data transmission mode of IEEE-1394 comprises the location (Source ID) and size of the digital data (Data Length) in a memory device associated with the peripheral device as shown by P1394 Draft 8.0v2 (Read request, page 154, Fig. 6-8 and page 157, Fig. 6-12 and Write request, page 158, Fig. 6-13). Therefore, it would have been obvious to one of ordinary skill in the art to claim the use of asynchronous protocol for communication between devices so to take the advantage of the IEEE-1394 communication protocol standard defined by IEEE-1394 such as saving cost and furthermore carrying simultaneously Video and data over the same serial bus at high speed transmission.

Regarding claim 10, Ludtke further discloses

Receiving control information in response to a user initiated command, the control information controlling operating modes of the peripheral consumer electronic device (Col. 10, lines 2-36);

Navigating the menu in the peripheral device in response to the control information (selecting and dragging the camera 60 into the 1st subpane 72 as a source device for transmitting data; selecting and dragging the VCR64 into the 2nd subpane 72 as a sink device for transmitting data Col. 9, lines 43-55), wherein the step of navigating comprises updating the digital data (for each selecting and dragging operation, the 1st and 2nd subpane are updated); and

Transferring the updated digital data (the 1st subpane 72 is updated with graphical representation 80 and available control functions 81. 2nd subpane 74 is updated with graphical representation 84 and available control functions 85 in response to the selecting and dragging function, Fig. 7; Col. 9, lines 55-65+) to the display device.

As to limitation "providing to said display device a second message comprising the location and size of the updated digital data" is further obvious over P1394 Draft 8.0v2 by its function control protocol (FCP) in which the peripheral device transmits a control command and response by asynchronous packet for each Asynchronous operation (read/write request or "message"); see P1394 Draft 8.0v2 pages 151-179. The structure of the FCP frame packet is updated (2nd message for each control command and response between devices) accordingly with its location

(Source ID) and updated size of the digital data (Data Length) for each operation, as shown by P1394 Draft 8.0v2 pages 175-177.

Regarding claim 11, as to "wherein the step of transferring the digital video data (OSD) via the serial bus utilizes an isochronous transfer mechanism of the serial bus" is further obvious over IEEE-1394 because isochronous transfer protocol allows multiple applications (i.e. video and other data) to simultaneously transmit isochronous data across the bus structure (Ludtke, Col. 1, lines 45-48).

Regarding claim 12, Ludtke discloses a display device (Fig. 1, el. 18 or 19) comprising:

Means (I/O busses 12, 16 and 17; Fig. 1) for communicating with a peripheral device (to other devices) interconnected by a digital bus (1394 network);

Means (Computer 18 or TV 19) for receiving digital video content;

Means (TV 19 without processor) for receiving, from the peripheral device, digital video data (less elaborate video graphical user interface stored in memory 20, el. 26) representative of an on-screen display menu associated with peripheral device (Col. 7, lines 54-60), the digital data being capable of being displayed (see Fig. 5); and

Means (TV 19) for overlaying and displaying the digital video data onto the digital video content (superimposed over the screen; see Fig. 5-9).

Ludtke fails to disclose the digital video content and the digital video data are transferring **as separate data** via the digital bus; however, Ludtke' s network uses IEEE-1394 for interconnecting all connected devices and transferring video data and digital OSD video data (Col. 5, lines 35-60). Ludtke further discloses in the section "background of the invention" that a communication protocol specifying isochronous and asynchronous access/transfer type is known to be the IEEE-1394 standard (Col. 1, lines 25-51).

P1394 Draft 8.0v2 (pages 151-179) discloses that utilizing an asynchronous transfer mechanism of the serial bus and controlling the equipments connected to IEEE-1394 serial bus is done by function control protocol (FCP) in which the peripheral device transmits a control command and response by asynchronous packet. The structure of the FCP frame (the read/write request for data block packet or 1st message) in the asynchronous data transmission mode of IEEE-1394 comprises the location (Source ID) and size of the digital data (Data Length) in a memory device associated with the peripheral device as shown by P1394 Draft 8.0v2 (Read request, page 154, Fig. 6-8 and page 157, Fig. 6-12 and Write request, page 158, Fig. 6-13). Therefore, it would have been obvious to one of ordinary skill in the art to take the advantage of the standard IEEE-1394 communication protocol to transmit digital video content over isochronous protocol and digital OSD data in the form of video data (control data) over asynchronous protocol, as **separate data** over the 1394 Bus, so to save cost of implementation and furthermore able to carry simultaneously video and data over the same serial bus at high speed transmission.

Regarding claim 13, Ludtke (Fig. 1) discloses a method for controlling a peripheral consumer electronic device (VCR 14; Camera 10; Fig.1; Col. 4, lines 45-47) interconnected via an IEEE 1394 serial bus 12, 17, 16 to a display device 18 or 19 (Col. 4, lines 48-65+ and Col. 5, lines 35-60) comprising:

transferring (24) the digital video content (Camera 10 or VCR 14 provides stream of video data under play mode) and the digital video data (self-describing information) via the digital IEEE-1394 bus 12, 17, 16 to the display device 18 or 19 whereby the digital video content and the digital video data may be combined and displayed on the display device (Col. 5, lines 39-60 and Col. 10, lines 3-36).

Generating, in the peripheral consumer electronic device, digital video data representative of an OSD menu associated with the peripheral device, the digital video data ("Device Image" in Fig. 3, el. 26 which is part of **"self-describing information"** represents with icons 60, 64, 68 and 69, as "digital OSD video data" displays on the television. The "Device Image" is generated, stored in ROM 20 within the peripheral device (i.e., camera 10) and transferred to the computer system 18 for displaying on the TV 19 (Fig. 5) in the form of video data. The Examiner cites Col. 9, lines 14-19 to support "... the icons are the graphical representations *obtained by the computer system 18 from the ROM 20* within each device...". Ludtke further discloses in one embodiment in which when a (peripheral) device is coupled in a network configuration, which includes only a television 19 without a processor see Col. 7, lines 48-60. In this embodiment, Ludtke clearly discloses the "Device Image"/self-describing information is in a format (i.e., video) understood by

the TV 19 (without a processor) so to be able to display on the TV 19, see Col. 5, lines 3-7, with the less elaborate GUI, i.e., Fig. 5, and through this GUI, the user is then able to control the operation of the device see Col. 5, lines 25-35) being capable of being displayed;

Ludtke fails to disclose the digital video content and the digital OSD video data are transferring **as separate data** via the digital bus; however, Ludtke' s network uses IEEE-1394 for interconnecting all connected devices and transferring video data and digital OSD video data (Col. 5, lines 35-60). Ludtke further discloses in the section "background of the invention" that a communication protocol specifying isochronous and asynchronous access/transfer type is known to be the IEEE-1394 standard (Col. 1, lines 25-51).

P1394 Draft 8.0v2 (pages 151-179) discloses that utilizing an asynchronous transfer mechanism of the serial bus and controlling the equipments connected to IEEE-1394 serial bus is done by function control protocol (FCP) in which the peripheral device transmits a control command and response by asynchronous packet. The structure of the FCP frame (the read/write request for data block packet or 1st message) in the asynchronous data transmission mode of IEEE-1394 comprises the location (Source ID) and size of the digital data (Data Length) in a memory device associated with the peripheral device as shown by P1394 Draft 8.0v2 (Read request, page 154, Fig. 6-8 and page 157, Fig. 6-12 and Write request, page 158, Fig. 6-13). Therefore, it would have been obvious to one of ordinary skill in the art to take the advantage of the standard IEEE-1394 communication protocol

to transmit digital video content over isochronous protocol and digital OSD data in the form of video data (control data) over asynchronous protocol, as **separate data** over the 1394 Bus, so to save cost of implementation and furthermore able to carry simultaneously video and data over the same serial bus at high speed transmission.

Regarding claim 14, Regarding claim 12, Ludtke discloses a display device (Fig. 1, el. 18 or 19) comprising:

Means (I/O busses 12, 16 and 17; Fig. 1) for communicating with a peripheral device (to other devices) interconnected by a digital bus (1394 network);

Means (Computer 18 or TV 19) for receiving digital video content via the IEEE 1394 bus;

Means (TV 19 without processor) for receiving, from the peripheral device, digital video data (less elaborate video graphical user interface stored in memory 20, el. 26) representative of an on-screen display menu associated with peripheral device (Col. 7, lines 54-60) via the IEEE-1394 bus, the digital data being capable of being displayed (see Fig. 5); and

Means (TV 19) for combining and displaying the combined digital video data and the digital video content to generate a combined video image (TV 19 must combine the digital video data and the digital video content in order to generate a combined video image and to display it, as disclosed; see Fig. 5-9).

Means (TV 19) for displaying the combine video image (Fig. 5-9).

Ludtke fails to disclose the digital video content and the digital OSD video data being received **as separate data** via the digital bus; however, Ludtke' s network uses IEEE-1394 for interconnecting all connected devices and transferring video data and digital OSD video data (Col. 5, lines 35-60). Ludtke further discloses in the section "background of the invention" that a communication protocol specifying isochronous and asynchronous access/transfer type is known to be the IEEE-1394 standard (Col. 1, lines 25-51).

P1394 Draft 8.0v2 (pages 151-179) discloses that utilizing an asynchronous transfer mechanism of the serial bus and controlling the equipments connected to IEEE-1394 serial bus is done by function control protocol (FCP) in which the peripheral device transmits a control command and response by asynchronous packet. The structure of the FCP frame (the read/write request for data block packet or 1st message) in the asynchronous data transmission mode of IEEE-1394 comprises the location (Source ID) and size of the digital data (Data Length) in a memory device associated with the peripheral device as shown by P1394 Draft 8.0v2 (Read request, page 154, Fig. 6-8 and page 157, Fig. 6-12 and Write request, page 158, Fig. 6-13). Therefore, it would have been obvious to one of ordinary skill in the art to take the advantage of the standard IEEE-1394 communication protocol to transmit digital video content over isochronous protocol and digital OSD data in the form of video data (control data) over asynchronous protocol, as **separate data** over the 1394 Bus, so to save cost of implementation and furthermore able to carry simultaneously video and data over the same serial bus at high speed transmission.

Regarding claim 15, as to "wherein the digital video content is received from the peripheral device using an isochronous transfer mechanism of the IEEE-1394 serial bus" is further obvious and met by standard IEEE-1394 because isochronous transfer protocol allows multiple applications (i.e. video and other data) to simultaneously transmit isochronous data across the bus structure (Ludtke, Col. 1, lines 45-48). Therefore, it would have been obvious to one of ordinary skill in the art to take the advantage of the IEEE-1394 communication protocol standard so to save cost and simplify the implementation of the system while able to transmit simultaneously Video and data over the same serial bus at high speed transmission.

Regarding claim 16, as to "wherein the digital video data representative of the OS menu is received from the peripheral device using an asynchronous transfer mechanism of the IEEE-1394 serial bus" is further obvious and met by standard IEEE-1394 communication protocol because asynchronous transfer protocol are traditional data transfer operations which take place as soon as possible and transfer an amount of data from a source to a destination (Ludtke, Col. 1, lines 48-51). Therefore, it would have been obvious to one of ordinary skill in the art to take the advantage of the IEEE-1394 communication protocol standard so to save cost and simplify the implementation of the system while able to transmit simultaneously Video and data over the same serial bus at high speed transmission.

Regarding claim 17, As to "wherein the means for receiving digital video data includes means for receiving a message indicative of the availability of the digital video data representative of the OSD menu via the asynchronous transfer mechanism of the IEEE-1394 serial bus" is further obvious and met by standard IEEE-1394 communication protocol because P1394 Draft 8.0v2 (pages 151-179) discloses that utilizing an asynchronous transfer mechanism of the serial bus and controlling the equipments connected to IEEE-1394 serial bus is done by function control protocol (FCP) in which the peripheral device transmits a control command and response by asynchronous packet. The structure of the FCP frame (the read/write request for data block packet or message) in the asynchronous data transmission mode of IEEE-1394 comprises the location (Source ID) and size of the digital data (Data Length) in a memory device associated with the peripheral device as shown by P1394 Draft 8.0v2 (Read request, page 154, Fig. 6-8 and page 157, Fig. 6-12 and Write request, page 158, Fig. 6-13).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Fax Information

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or Faxed to: 703-872-9306
For informal or draft communications, please label "PROPOSED" or "DRAFT"

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Tran whose telephone number is 703-308-7372. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on 703-305-4380. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hai Tran

Examiner
Art Unit 2611

04/30/2004
HT:ht